



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,570	06/11/2002	Michael Jupe	R.36764	1568

2119 7590 09/22/2004

RONALD E. GREIGG
GREIGG & GREIGG P.L.L.C.
1423 POWHATAN STREET, UNIT ONE
ALEXANDRIA, VA 22314

EXAMINER

HOGAN, JAMES SEAN

ART UNIT PAPER NUMBER

3752

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,570

Applicant(s)

JUPE ET AL.

Examiner

James S Hogan

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/11/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 17-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/11/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3752

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because of use of the terms "means for" throughout the whole of the abstract. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-18, and 22-31 rejected under 35 U.S.C. 102(b) as being anticipated by Kariya et al. (U.S. Patent: 5,295,469).

Referring to claim 17-18, and 27-29 Kariya et al. ('496) discloses an apparatus for furnishing a working pressure in a fluid (see Figure 7), in which a first pressure (common rail) prevails in a first region at an inlet of a larger

Art Unit: 3752

diameter (spring chamber 290), that is higher than the working pressure, a second region at a smaller diameter (throttle passage 310) in which the working pressure (operating pressure) is to be furnished. The pressure of the fluid is reduced by the means of a piston (230), guided longitudinally, displaced in a bore (340), and urged in the direction of the first region by elastic means (spring 240). The bore has a structure varying in the longitudinal direction, with a first portion of greater inside diameter and a second portion of smaller inside diameter.

Referring to claims 22-26, a description in the first claim (Col. 8, line 40) of Kariya et al. ('496) discloses an embodiment in which a first valve receives fuel into an accumulator and a second valve discharges fuel to a low pressure side. As understood, with the embodiment of the second valve this would enable the second region of the inlet to further comprise of a pressure holding valve.

Referring to claims 30-31, Kariya et al. ('496) discloses the method by which the invention, specifically by which the pressure of a fluid from the first region, at a high pressure is reduced into a second region at a lower pressure (Col. 7, line 52-68). Kariya et al. ('496) further discloses (see Figure 13) the adjustment of pressure by varying the length of a throttle passage (315). As discussed previously, with the embodiment disclosed as having a second valve with the Kariya et al. ('496) invention, the method of compensation for an elevated working pressure by a pressure-holding valve, is also disclosed.

Claim Rejections - 35 USC § 103

Art Unit: 3752

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Kariya et al. (U.S. Patent: 5,295,469).

Referring to claims 19-21, Kariya teaches of a fuel injection system that does not specify pressure ranges in the first region "between about 200 and 1800 bar", nor in the second working region of "about 30 bar". The range claims are deemed broad when compared to the working operating pressures of any fuel injections systems. Therefore it is decided that one of ordinary skill in the art at the time the invention was made would recognize the desired operating pressures of any region of a fuel injection systems, and would adjust them according to desired performance.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows; Haeberer et al., Maier, et al., and Rodriguez-Amaya et al. all disclose similar embodiments of the current invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S Hogan whose telephone number is

Art Unit: 3752

(703) 308-6196. The examiner can normally be reached on Mon-Fri, 7:30a-4:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Hogan
08/27/04



MICHAEL MAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700